

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Stephanie M. Kladakis et al.

Application No.: 10/775,034

Filed: February 9, 2004

Entitled: SCAFFOLDS WITH VIABLE TISSUE

Docket No.: 22956-260 (MIT5032)

Conf. #: 6915

Group Art Unit: 3738

Examiner: Brian E. Pellegrino

I hereby certify that this correspondence, and any document said to be attached hereto, is being filed via EFS Web on the date set forth below.

September 13, 2007

By:

Date of Signature and Mail Deposit

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INFORMATION DISCLOSURE STATEMENT (IDS)

Dear Sir:

Pursuant to 37 CFR 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement is being filed after the filing of a Request for Continued Examination and before the mailing date of the first Office Action on the merits in the continued examination.

Applicant has not submitted copies of each cited U.S. patent and U.S. patent application as required by 37 CFR 1.98(a)(2)(i), amended October 2004, as the U.S. Patent and Trademark

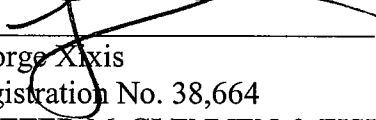
Office has waived this requirement for all U.S. patent applications. Applicant submits herewith copies of foreign and non-patents in accordance with 37 CFR 1.98(a)(2).

In accordance with 37 CFR 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR 1.56(a) exists. In accordance with 37 CFR 1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the statement is, or is considered to be, material to patentability as defined in § 1.56 (b). It is submitted that the Information Disclosure Statement is in compliance with 37 CFR 1.98 and the Examiner is respectfully requested to consider the listed references.

No fee is believed to be due with this filing, however, the Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 141449, under Order No. 22956-260.

Dated: September 13, 2007

Respectfully submitted,

By 
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Substitute for form 1449A/B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/775,034
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				First Named Inventor	Stephanie M. Kladakis
				Art Unit	3738
				Examiner Name	Brian E. Pellegrino
Sheet	1	of	5	Attorney Docket Number	022956-0260

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (# known)			
		3,739,402	06/19/1973	Cooley et al.	
		3,812,017	05/21/1974	Santangelo et al.	
		3,857,932	12/31/1974	Shepard et al.	
		4,520,821	06/04/1985	Schmidt et al.	
		4,553,272	11/19/1985	Mears	
		4,597,766	07/01/1986	Hilal et al.	
		4,609,551	09/02/1986	Caplan et al.	
		4,801,299	01/31/1989	Brendel et al.	
		4,837,285	06/06/1989	Berg et al.	
		4,902,508	02/20/1990	Badylak et al.	
		5,041,138	08/20/1991	Vacanti et al.	
		5,053,050	10/01/1991	Itay	
		5,061,281	10/29/1991	Mares et al.	
		5,078,744	01/07/1992	Chvapil	
		5,108,989	04/28/1992	Amento et al.	
		5,147,400	09/15/1992	Kaplan et al.	
		5,206,023	04/27/1993	Hunziker	
		5,326,357	07/05/1994	Kandel	
		5,366,756	11/22/1994	Chesterfield et al.	
		5,425,766	06/20/1995	Bowald	
		5,443,950	08/22/1995	Naughton et al.	
		5,445,833	08/29/1995	Badylak et al.	
		5,455,041	10/03/1995	Genco et al.	
		5,480,827	01/02/1996	Guillemin et al.	
		5,514,181	05/07/1996	Light et al.	
		5,577,517	11/26/1996	Bonutti	
		5,612,028	03/18/1997	Sackier et al.	
		5,632,745	05/27/1997	Schwartz	
		5,677,355	10/14/1997	Shalaby et al.	
		5,697,976	12/16/1997	Chesterfield et al.	
		5,709,854	01/20/1998	Griffith-Cima et al.	
		5,720,969	02/24/1998	Gentile et al.	
		5,723,331	03/03/1998	Tubo et al.	
		5,735,903	04/1998	Li et al.	
		5,736,372	04/07/1998	Vacanti et al.	
		5,755,791	05/26/1998	Whitson et al.	
		5,759,190	06/02/1998	Vibe-Hansen et al.	
		5,766,631	06/16/1998	Arnold	
		5,769,899	06/23/1998	Schwartz et al.	
		5,786,217	07/28/1998	Tubo et al.	
		5,830,493	11/03/1998	Yokota et al.	
		5,837,235	11/17/1998	Mueller et al.	
		5,842,477	12/01/1998	Naughton et al.	
		5,891,558	04/06/1999	Bell et al.	
		5,902,741	05/11/1999	Purchio et al.	
		5,904,717	05/18/1999	Brekke et al.	

Examiner Signature		Date Considered	
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Sheet	2	of	5	Attorney Docket Number	022956-0260

	5,904,716	05/18/1999	Gendler	
	5,914,121	06/22/1999	Robey et al.	
	5,922,025	07/13/1999	Hubbard	
	5,964,805	10/12/1999	Stone	
	5,968,096	10/19/1999	Whitson et al.	
	5,980,889	11/09/1999	Butler et al.	
	5,989,269	11/23/1999	Vibe-Hanen et al.	
	5,990,194	11/23/1999	Dunn et al.	
	5,990,378	11/23/1999	Ellis	
	6,001,352	12/14/1999	Boyan et al.	
	6,001,394	12/14/1999	Daculsi et al.	
	6,005,161	12/21/1999	Brekke et al.	
	6,072,742	02/22/2000	Lee et al.	
	6,080,579	06/27/2000	Hanley, Jr. et al.	
	6,096,532	08/01/2000	Armstrong et al.	
	6,103,255	08/15/2000	Levene et al.	
	6,110,209	08/29/2000	Stone	
	6,110,212	08/2000	Gregory	
	6,117,166	09/12/2000	Winston et al.	
	6,120,514	09/19/2000	Vibe-Hansen et al.	
	6,121,042	09/19/2000	Peterson et al.	
	6,123,727	09/26/2000	Vacanti et al.	
	6,132,463	10/17/2000	Lee et al.	
	6,139,578	10/31/2000	Lee et al.	
	6,140,039	10/31/2000	Naughton et al.	
	6,143,293	11/07/2000	Weiss et al.	
	6,153,292	11/28/2000	Bell et al.	
	6,176,880	01/23/2001	Plouhar et al.	
	6,179,872	01/30/2001	Bell et al.	
	6,180,007	01/30/2001	Gentile et al.	
	6,183,737	02/06/2001	Zaleske et al.	
	6,187,053	02/13/2001	Minuth	
	6,187,329	02/13/2001	Agrawal et al.	
	6,197,061	03/06/2001	Masuda et al.	
	6,200,606	03/13/2001	Peterson et al.	
	6,214,045	04/10/2001	Corbitt, Jr. et al.	
	6,214,055	04/10/2001	Simionescu et al.	
	6,251,673	06/26/2001	Winkler	
	6,277,151	08/21/2001	Lee et al.	
	6,283,980	09/04/2001	Vibe-Hansen et al.	
	6,287,340	09/11/2001	Altman et al.	
	6,291,240	09/18/2001	Mansbridge et al.	
	6,306,424	10/23/2001	Vyakarnam et al.	
	6,319,712	11/20/2001	Meenen et al.	
	6,331,312	12/18/2001	Lee et al.	
	6,365,149	04/02/2002	Vyakarnam et al.	
	6,378,527	04/30/2002	Hungerford et al.	
	6,378,572	04/30/2002	Neubauer et al.	
	6,379,367	04/30/2002	Vibe-Hansen et al.	
	6,511,958	01/28/2003	Atkinson et al.	

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Sheet	3	of	5	Attorney Docket Number	022956-0260

	6,534,084	03/18/2003	Vyakarnam et al.	
	6,541,024	04/01/2003	Kadiyala et al.	
	6,599,323	07/29/2003	Melican et al.	
	6,605,294	08/12/2003	Sawhney	
	6,773,458	08-2004	Brauker et al.	
	6,840,962	01/11/2005	Vacanti et al.	
	6,852,330	02/08/2005	Bowman et al.	
	6,884,428	04/26/2005	Binette et al.	
	2001/0014475	08/16/2001	Frondoza et al.	
	2001/0016353	08/23/2001	Janas et al.	
	2001/0023373	09/20/2001	Plouhar et al.	
	2001/0039453	11/08/2001	Gresser et al.	
	2001/0053839	12/20/2001	Noishiki et al.	
	2001/0053353	12/20/2001	Griffith et al.	
	2002/0009805	01/24/2002	Nevo et al.	
	2002/0009806	01/24/2002	Hicks, Jr.	
	2002/022883	02/21/2002	Burg	
	2002/0028192	03/07/2002	Dimitrijevic et al.	
	2002/0029055	03/07/2002	Bonutti	
	2002/0062151	05/23/2002	Altman et al.	
	2002/0082631	06/27/2002	Bonutti	
	2002/0091403	07/11/2002	Bonutti	
	2002/0091406	07/11/2001	Bonutti	
	2002/0099401	07/25/2002	Bonutti	
	2002/0099448	07/25/2002	Hiles et al.	
	2002/0107570	08/08/2002	Sybert et al.	
	2002/0127265	09/12/2002	Bowman et al.	
	2002/0133229	09/19/2002	Laurencin et al.	
	2002/0133235	09/19/2002	Hungerford et al.	
	2002/0176893	11/28/2002	Wironen, et al.	
	2003/0026787	02/06/2003	Fearnott et al.	
	2003/0077311	04/24/2003	Vyakarnam et al.	
	2004/0078077	04/22/2004	Binette et al.	
	2004/0078090	04/22/2004	Binette et al.	
	2005/0113937	05/26/2005	Binette et al.	

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ²
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)	MM-DD-YYYY			
		CA 2,247,158	08/28/1997	Naughton et al.		
		DE 198 12 195	09/30/1999	Haft		
		EP 0 274 898	07/20/1988	Hinsch et al.		
		EP 0 562 864	09/29/1993	Rosenthal et al.		
		EP 0 955 024	11/10/1999	Adamkiewicz		
		EP 1 027 897	08/16/2000	Isotos BV		
		EP 1 064 958	01/03/2001	Vvakarnam et al.		

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Sheet	4	of	5	Attorney Docket Number	022956-0260

	EP 1 167 517	01/02/2002	de Bruijn		
	EP 1 216 718	06/26/2002	Ethicon, Inc.		
	EP 1 348 451	10/01/2003	Ethicon, Inc.		
	EP 1 410 811	04/21/2004	Ethicon, Inc.		
	EP 1 506 790	02/16/2005	Depuy Mitek, Inc.		
	WO 86/00533	01/30/1986	Leenslag et al.		
	WO 95/33821	12/14/1995	Purchio et al.		
	WO 97/30662	08/28/1997	Naughton et al.		
	WO 97/46665	12/11/1997	Rieser et al.		
	WO 98/48860	11/05/1998	Jahoda et al.		
	WO 99/16381	04/08/1999	Tripp et al.		
	WO 99/47097	09/23/1999	Haft		
	WO 00/74741	12/14/2000	Universitaetslinikum Freiburg		
	WO 01/15753	03/08/2001	IDM Immuno-Designed Molecules		
	WO 01/85226	11/15/2001	Massachusetts Institute of Technology		
	WO 03/017826	03/06/2003	Regeneration Technologies		

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NON PATENT LITERATURE DOCUMENTS				
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.		T ²
		ALBRECHT et al., "Closure of Osteochondral Lesions Using Chondral Fragments and Fibrin Adhesive," <i>Arch. Orthop. Trauma Surg.</i> 101: 213-217 (1983).		
		ALBRECHT, F.H., "The Closure of Joint Cartilage Defects by Means of Cartilage Fragments and Fibrin Adhesive," <i>Fortschr. Med.</i> 101(37):1650-52 (1983).		
		CATERSON E.J., et al. "Three-Dimensional Cartilage Formation by Bone Marrow-Derived Cells Seeded in Polylactide/Alginate Amalgam," <i>J Biomed Mater Res.</i> 57(3):394-403 (2001) *(Abstract Only).		
		DEUEL, T. et al., "Growth Factors in Principles of Tissue Engineering," Second Edition, Academic Press pp. 129-141 (2000).		
		European Search Report, for EP 03 25 6522, mailed February 24, 2004.		
		FRENKEL, S, Ph.D. and Paul E. Di Cesare, M.D., "Degradation and Repair of Articular Cartilage," <i>Frontiers in Bioscience</i> , 4 th ed., pp. 671-685, pgs 1-32 (October 15, 1999).		
		GOOCH, K. et al., "Mechanical Forces and Growth Factors Utilized in Tissue Engineering" <i>Frontier in Tissue Engineering</i> , Pergamon Chapter II.3, pp. 61-82 (1998).		
		GRIGOLO, B., et al. "Transplantation of Chondrocytes Seeded on a Hyaluronan Derivative (hyaff-11) into Cartilage Defects in Rabbits," <i>Biomaterials</i> 22(17):2417-2424 (2001) *(Abstract Only).		
		HUTMACHER DW., "Scaffold Design and Fabrication Technologies for Engineering Tissues-State of the Art and Future Prospectives", <i>J Biomater Sci Polym Ed</i> , 12(1):107-124 (2001) *(Abstract Only).		
		HUTMACHER DW., "Scaffolds in Tissue Engineering Bone and Cartilage", <i>Biomaterials</i> ,		

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		21(24):2529-2543 (2000) *(Abstract Only).	
		IBARRA, C. M.D. et al. "Tissue-Engineered Meniscus – Cells and Matrix", <i>Tissue Engineering in Orthopedic Surgery</i> 31(3):411-418 (July 2000).	
		KOSKI, J. M.D. et al., "Meniscal Injury and Repair", <i>Orthopedic Clinics of North American</i> , 31(3):419-435 (July 2000).	
		KOSKI, J. M.D. et al., "Tissue-Engineered Ligament – Cells, Matrix, and Growth Factors" <i>Tissue Engineering in Orthopedic Surgery</i> , 31(3):437-452 (July 2000).	
		MURRAY, M., et al. "The Migration of Cells from the Ruptured Human Anterior Cruciate Ligament into Collagen-Glycosaminoglycan Regeneration Templates in Vitro," <i>Biomaterials</i> 22:2393-2402 (2001).	
		RADICE, M. "Hyaluronan-Based Biopolymers as delivery vehicles for Bone-Marrow-Derived Mesenchymal Progenitors", <i>J Biomed Mater Res.</i> 50(2):101-9 (2000) *(Abstract Only).	
		ROSSI, et al., "Embryonic Purkinje Cells Grafted on the Surface of the Cerebellar Cortex Integrate in the Adult Unlesioned Cerebellum," <i>EP J. Neuroscience</i> 4:589-93 (1992)	
		SAMPATH, T. K., et al. "In Vitro Transformation of Mesenchymal Cells Derived From Embryonic Muscle Into Cartilage In Response to Extracellular Matrix Components of Bone," <i>Proceedings of the National Academy of Science of the USA</i> , 81(1): 3419-3423 (June 1984).	
		SCHREIBER RE., et al. "A Method for Tissue Engineering of cartilage by Cell Seeding on Bioresorbable Scaffolds," <i>Ann NY Acad Sci.</i> 875:394-404 (1999) *(Abstract Only).	
		STONE, K. et al. "Meniscal Regeneration with Copolymeric Collagen Scaffolds," <i>American Journal of Sports Medicine</i> 20(2):104-111 (1992).	
		VAN SUSANTE JLC, et al. "Linkage of Chondroitin-Sulfate to Type I Collagen Scaffolds Stimulates the Bioactivity of Seeded Chondrocytes in Vitro", <i>Biomaterials</i> 22(17):2359-2369 (2001) *(Abstract Only).	

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